UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,656	03/29/2007	Greig Reid Brebner	0074-542855	9343
DANN, DORFMAN, HERRELL & SKILLMAN 1601 MARKET STREET SUITE 2400 PHILADELPHIA, PA 19103-2307			EXAMINER	
			JACKSON, DANIELLE	
			ART UNIT	PAPER NUMBER
			3636	
			MAIL DATE	DELIVERY MODE
			04/28/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)		
	10/579,656	BREBNER, GREIG REID		
Office Action Summary	Examiner	Art Unit		
	DANIELLE JACKSON	3636		
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address		
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).		
Status				
Responsive to communication(s) filed on 18 Ma     This action is <b>FINAL</b> . 2b)☑ This     Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro			
Disposition of Claims				
4)  Claim(s) 1-64 is/are pending in the application.  4a) Of the above claim(s) is/are withdray  5)  Claim(s) is/are allowed.  6)  Claim(s) 1-29,34,35,40-48,50 and 59-64 is/are  7)  Claim(s) 30-33,36-39,49 and 51-58 is/are object  8)  Claim(s) are subject to restriction and/or  Application Papers  9)  The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access that any objection to the content of	vn from consideration.  rejected. cted to. relection requirement.  r. epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is objected to by the education of the drawing(s) is objected to by the education of the drawing(s) is objected to by the education of the drawing(s) is objected to by the education of the drawing(s) is objected to by the education of the drawing(s) is objected to by the education of the drawing(s) is objected to by the education of the drawing(s) is objected to by the education of the drawing(s) is objected to by the education of the drawing(s) is objected to by the education of the education	e 37 CFR 1.85(a). lected to. See 37 CFR 1.121(d).		
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.		
Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.				
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 3/29/07, 10/20/08.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	nte		

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12-21, 34, 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 recites "a force spreading means". This element was already recited in a previous claim (a *deployable* force spreading means); therefore is in unclear whether this is the same element as the one recited in a pervious claim or a different element with the same name.

Claims 16 and 34 recite "an inner rod", "a force spreading means" and "an outer tube". These elements were already recited in a previous claim; therefore is in unclear whether these are the same elements as the ones recited in a pervious claim or different elements with the same name.

Claim 35 recites "an inner rod". This element was already recited in a previous claim; therefore is in unclear whether this is the same element as the one recited in a pervious claim or a different element with the same name.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 23, 27, 41 and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Kida (US-4,474,201).

Claim 23: Kida discloses an umbrella frame comprising: a shaft (1), a plurality of rib members (20, 22), first ends of said rib members spaced about and pivotally connected at or adjacent a first end of said shaft, a primary sliding means (9) movable along the shaft to erect or collapse the umbrella frame, a secondary sliding means (23) movable along the shaft between the primary sliding means and the first end of the shaft, a plurality of primary struts (27), each of which is pivotally connected between the primary sliding means and a rib member, and a plurality of secondary struts (24), each of which is pivotally connected between the secondary sliding means and a primary strut.

Claim 27: Kida teaches each secondary strut to be connected to a primary strut a pre-determined distance from its connection with said primary sliding means, wherein said pre- determined distance is substantially equal to the length of said secondary strut (as it appears in FIG. 1).

Claim 41: Kida discloses an umbrella frame comprising: a shaft (1), a plurality of rib members (20, 22) spaced about said shaft, each rib member including a first portion

(20) pivotally connected at or adjacent a first end of said shaft and a second portion (22) freely slidable relative to said first portion, a sliding means (9) movable along the shaft to erect or collapse the umbrella frame, and a plurality of struts (27), each of which is pivotally connected between the sliding means and the second portion of said rib member (column 3, lines 32-40).

Claim 42: Kida teaches a secondary sliding means (23) movable along the shaft between said sliding means and the first end of said shaft, and a plurality of secondary struts (24) each pivotally connected between said secondary sliding means and a respective strut.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kida (US-4,474,201) in view of Chang (US-5,694,958).

Claims 1-6: Kida discloses an umbrella comprising: a shaft (1); a plurality of rib members (20, 22), first ends of said rib members spaced about and pivotally connected at or adjacent a first end of said shaft; a canopy (33); a sliding means (9) movable along the shaft to erect or collapse the umbrella; and a plurality of struts (27), each of which is pivotally connected between the sliding means and a rib member. Kida further teaches

Application/Control Number: 10/579,656

by the end of each rib member.

Art Unit: 3636

a secondary sliding means (23) movable along the shaft between the primary sliding means and the first end of the shaft and a plurality of secondary struts (24), each secondary strut to be connected to a primary strut a pre-determined distance from its connection with said primary sliding means, wherein said pre- determined distance is substantially equal to the length of said secondary strut (as it appears in FIG. 1). Kida lacks pockets in the canopy and a deployable force spreading means. Chang teaches an umbrella wherein each rib (30) has a tip with a deployable force spreading means (40) attached thereto and comprising a bearing surface (41), said deployable force spreading means fitting into a plurality of pockets (61) located along the periphery on the canopy (6). It would have been obvious to one of ordinary skill at the time to modify Kida to include a deployable force spreading means that fit into pockets on the canopy, as taught by Chang, so that the canopy does not tear from the pressure applied

Page 5

Claims 7 and 8: Kida is silent on the exact length of the secondary struts, although it appears they are substantially about half as long as the struts. However, it would have been obvious to one of ordinary skill to modify Kida so that the secondary struts were half the length of the struts, or 15/26 times the length of the struts, since changes in proportion involves only routine skill in the art. *In re* Reese 129 USPQ 402.

Claim 22: While Kida does not disclose an umbrella with no more than six rib members; however it would have been obvious to only have six rib members since that is common and old and well-known to have six rib members, and one of ordinary skill

would know that changing the number of rib members would be an obvious variation that would still prove effective.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kida (US-4,474,201) in view of Chang (US-5,694,958) as applied to claim 6 above, and further in view of Siers (US-2,047,711).

The combination of Kida and Chang is discussed above and appears to have a spacing means (part of 23) that separates the separate sliding means when the umbrella is in the fully deployed position (as can be seen in FIG. 1), however the spacing means appears to be attached to the secondary sliding means. Siers teaches an umbrella having a sliding means (25) and a secondary means (31) for attaching secondary struts, wherein the sliding means has a spacing means (28; page 2, first column, lines 22-28) that restricts the upward movement of the sliding means. It would have been obvious to one of ordinary skill to modify Kida and Chang to have the spacing means attached to the sliding means, as taught by Siers, because it is an obvious variation that would not have any effect on the functionality of the umbrella.

Claim11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kida (US-4,474,201) in view of Chang (US-5,694,958) as applied to claim 6 above, and further in view of Wiens et al. (US4,711,260).

The combination of Kida and Chang is discussed above but lacks a holding means. Wiens et al. discloses an umbrella having a sliding means (26) and a holding means (59) that holds the sliding means in place and acts as a bias (column 5, lines 46-58). It would have been obvious to one of ordinary skill to modify Kida and Chang to

include a holding means, as suggested by Wiens et al., so to provide a bias to stop movement of the sliding means.

Claims 25, 26, 40, 43-44 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kida (US-4,474,201) alone.

Claims 25, 26 and 43-45: Kida is silent on the exact length of the secondary struts, although it appears they are substantially about half as long as the primary struts. However, it would have been obvious to one of ordinary skill to modify Kida so that the secondary struts were half the length of the primary struts, or 15/26 times the length of the primary struts, since changes in proportion involves only routine skill in the art. *In re* Reese 129 USPQ 402.

Claims 28 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kida (US-4,474,201) as applied to claims 23 ad 42 above, and further in view of Siers (US-2,047,711).

Kida is discussed above and appears to have a spacing means (part of 23) that separates the separate sliding means when the umbrella is in the fully deployed position (as can be seen in FIG. 1), however the spacing means appears to be attached to the secondary sliding means. Siers teaches an umbrella having a sliding means (25) and a secondary means (31) for attaching secondary struts, wherein the sliding means has a spacing means (28; page 2, first column, lines 22-28) that restricts the upward movement of the sliding means. It would have been obvious to one of ordinary skill to modify Kida to have the spacing means attached to the sliding means, as taught by

Application/Control Number: 10/579,656

Art Unit: 3636

Siers, because it is an obvious variation that would not have any effect on the functionality of the umbrella.

Claims 29 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kida (US-4,474,201) as applied to claims 23 and 42 above, and further in view of Wiens et al. (US4,711,260).

Kida is discussed above but lacks a holding means. Wiens et al. discloses an umbrella having a sliding means (26) and a holding means (59) that holds the sliding means in place and acts as a bias (column 5, lines 46-58). It would have been obvious to one of ordinary skill to modify Kida to include a holding means, as suggested by Wiens et al., so to provide a bias to stop movement of the sliding means.

Claims 40 and 59: While Kida does not disclose an umbrella with no more than six rib members; however it would have been obvious to only have six rib members since that is common and old and well-known to have six rib members, and one of ordinary skill would know that changing the number of rib members would be an obvious variation that would still prove effective.

Claims 24, 48 and 60-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kida (US-4,474,201) as applied to claim 23 and 41 above, and further in view of Chang (US-5,694,958).

Kida is discussed above and has a canopy (33) but lacks a plurality of pockets on said canopy and a force spreading means provided on each rib member that is received in each pocket. Chang teaches an umbrella wherein each rib (30) has a tip with a deployable force spreading means (40) attached thereto and comprising a bearing

surface (41) to transfer radial force from the rib member to the periphery of the canopy (6), said deployable force spreading means fitting into a plurality of pockets (61) located along the periphery on the canopy. It would have been obvious to one of ordinary skill at the time to modify Kida to include a deployable force spreading means that fit into pockets on the canopy, as taught by Chang, so that the canopy does not tear from the pressure applied by the end of each rib member.

# Allowable Subject Matter

Claims 30-33, 36-39, 49 and 51-58 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 12-21, 34 and 35 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIELLE JACKSON whose telephone number is (571)272-2268. The examiner can normally be reached on Monday through Friday 8:30AM - 5PM.

Application/Control Number: 10/579,656 Page 10

Art Unit: 3636

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Dunn can be reached on (571) 272-6670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. J./ Examiner, Art Unit 3636

/DAVID DUNN/ Supervisory Patent Examiner, Art Unit 3636